A **This Week** EXCLUSIVE:

How we found Russia's forbidden satellite

By PAT FRANK

Illustration by Herb Mott

Somewhere inside the iron-clad borders of the Soviet Union lies the heavily guarded base from which the Reds have launched their super-rockets to the moon and beyond. Here, told by a world-famous reporter, is the story of how our intelligence teams broke one of the cold war's most tightly guarded secrets

Three years ago a top-secret report from inside Russia electrified U.S. and Allied defense-planning staffs. Russia had launched an Intercontinental Ballistics Missile with a range of 5,000 miles.

The launching of such a missile was a shock in itself, but even more of a jolt lay in the fact that Allied intelligence did not know where the firing had taken place. The giant missile had gone undetected by the powerful American radar station on the Turkish Black Sea Coast, which for months back had been successfully tracking other Soviet missiles. Thanks to this station, we knew exactly where the smaller missiles were based — at a place called Kapustin Yar, on the Volga, 50 miles southeast of Stalingrad.

But now the Russians had fired their big one — the world's first operational ICBM — and it hadn't been fired from Kapustin Yar. Therefore Russia had another — and much more important — missile base whose location was a complete mystery.

A site beyond the range of Western radar

In the Pentagon and Central Intelligence Agency in Washington, in the Air Ministries in London and Paris, in the headquarters of NATO, out came the maps of Russia. The faces studying them were perplexed. The Soviet Union stretches across the world's greatest land mass; the new base could be anywhere from the steppes of Siberia to the desolate Mongolian deserts. The only thing definite was that the launching site and point of impact were both beyond the range of Western radar. Or could it be that the intelligence report was wrong? Could Russian progress have been exaggerated, and no ICBM fired at all?

That was a possible explanation — until October, 1957, when the first Sputnik jolted the world. Sputnik proved once and for all that Russia had an ICBM capability — and Sputnik, like the earlier reported missile, had been launched without being detected by the Turkish-based radar.

For Western intelligence, the problem was critical. Russia possessed a tremendous missile base, the biggest in the world — literally Earth Spaceport No. 1. And, by consequence Target No. 1. Its location was totally unknown. And no means of cracking the secret appeared in sight.

Then dramatic assistance came from an unexpected source. Two Japanese mathematicians set themselves an exercise. Their exercise: to take the published data on Sputnik's orbit around the earth and figure out the satellite's point of origin on the earth's surface.

The computations involved were fantastically complex, but the two scientists produced a remarkable estimate: Sputnik's launching pad, they said, was in the Kyzyl Kum Desert, southeast of the gray and salty Aral Sea.

Instantly, Western intelligence analysts focussed their search on the Kyzyl Kum region. They realized that the secret they were looking for might be anywhere in a vast, semi-desert expanse of Kazakhstan, once known as "the graveyard of caravans," four times as big as Texas. Until Stalin's death the Kazah Soviet Socialist Republic was completely barred to foreigners. Even now, a traveler flying from Moscow to Samarkand and landing for refuelling at the industrial city of Karaganda is not permitted to leave the airport. Foreigners cannot travel by car, and are discouraged from traveling by train.

Detective work at the Pentagon

Now the detective work in the Pentagon began in earnest.

From the published weight of Sputnik I and Sputnik II, it was possible to calculate the dimensions of the rockets needed to place them in orbit. The experts figured that the big first-stage rocket must have measured nearly 60 feet in length and 19 feet in diameter. This enormous power plant would have to be built and assembled in Russia's industrial heartland — and then moved, somehow, to the launching site.

A cargo plane was out of the question — the Russians had none that big. A double-trailer truck could do it, but the Kazakhstan road system was known to be totally inadequate to support such a load. There remained the railroad.

It was a single-track affair running from Chkalov, in Great Russia, to —— *Continued on page 8*

GLOBAL DETECTIVE: *Novelist-correspondent Pat Frank wrote for* THIS WEEK *[October 4, 1959] "The Mystery Of The Sahara Ghost Plane." Today he takes you on another global detective case — the space-age cloak-and-dagger story of how Western intelligence zeroed in on the exact location of Russia's secret "Rocket City."*

Between adventures on the trail of far-flung mysteries, Mr. Frank writes best-selling novels: "Mr. Adam," "Hold Back The Night," "Forbidden Area" and most recently, "Alas, Babylon." His next will be a book-length fictionalized narrative of the Sahara Ghost Plane story. — THE EDITORS